

Title (en)

A hydrocyclone and a method of improving separation of solids.

Title (de)

Hydrozyklon und Verfahren zur Verbesserung der Trennung von Feststoffen.

Title (fr)

Hydrocyclone et procédé pour la séparation de matières solides.

Publication

**EP 0029553 A1 19810603 (EN)**

Application

**EP 80107053 A 19801114**

Priority

US 9452179 A 19791115

Abstract (en)

[origin: US4279743A] An air-sparged hydrocyclone apparatus and method, the apparatus including a substantially hollow, cyclone body having a cylindrical section and a downwardly oriented conical section. An inlet, an overflow and an underflow are also provided in the cyclone body. At least a portion of the wall of the cyclone body is modified to include an air-sparging section wherein air, under pressure, is forced into the interior of the cyclone body as a plurality of bubbles. The bubbles disrupt the boundary layer, freeing entrapped fine particles and also assist in carrying hydrophobic particles to the overflow. The introduction of discrete, small, air bubbles is enhanced by forming a portion of the wall of the cyclone body from a porous material.

IPC 1-7

**B04C 5/10**; **B03D 1/24**

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

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**EP 80107053 A 19801114**; AU 6378480 A 19801028; BR 8007243 A 19801107; CA 364658 A 19801114; JP 15877780 A 19801110; NO 803440 A 19801114; PL 22788380 A 19801115; US 9452179 A 19791115; ZA 806371 A 19801016